EDUCATION SCIENCE CENTRE KAMPALA

SCIENCE EDUCATION CENTRE KAMPALA

"MAKING SCIENCES PASSABLE"

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ULSCE SCIENCE BOOSTER PACKAGE 2024

CHEMISTRY PAPER 1

545/1

SET 1

2HOURS

Name:.....

Signature .....

Random number						personal number		

INSTRUCTIONS TO CANDIDATES.

- This paper consists of two sections **A** and **B**.
- Answer all the items in section A in the spaces provided.
- Section **B** has **two** parts **I** and **II**. Answer **one** item from each part.
- Answer **four** items in all.
- Any additional item(s) answered will not be scored.

FOR EXAMINER'S USE ONLY

SECTIONS	SCORE	EXAMINER
A		
B		
Total score		

SECTION A

Answer ***all*** items from this section.

Item 1

Whenever Kawaga would fall sick, he resisted going to hospital and chewed leaves of mangoes, eucalyptus plus a cup full of hot water in which he dissolved seeds of Dutchman's pipe. This time he presented with cough, flu and fever with convulsions and was rushed to a nearby health facility. His body temperature was high and was given some tablets then an injection. Kawaga's condition improved tremendously.

Task

(a) Point out why Kawaga was rushed to a healthy facility?

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(b) Help Kawaga to understand how the tablets he received and the injection work

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(c) Advise Kawaga on the long term use of medicine.

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Item 2

Constructors abandoned some materials at the construction site which James discovered while leveling the compound. They included some metal pieces, polyethene and cloth. Some cloth broke into tiny pieces while others remained intact. James was disturbed on how best to dispose off the materials that remained intact and is seeking for advice from the owner of the building.

Task

Using your knowledge of chemistry;

(a) help James;

(i) classify with reason the abandoned materials

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(ii) state the properties of the materials he found abandoned.

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(b) In what ways were the materials suitable for the uses they served?

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(c) Advise James on the impact of the materials on the environment.

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SECTION B

PART 1

Answer ***one*** item from this part

Item 3

Electricity connectivity in most parts of Uganda is still very low and rural communities have continued to cut down trees for fuel which is affecting the environment and likely to cause climate change. Kilembe mines can be revived to extract the metal for making electric cables which would benefit the communities despite the impact of the extraction process.

Task

Using your knowledge of chemistry, write a presentation explaining how the pure metal can be produced including the impact and benefits of the process.

Item 4

The discovery of crude oil and natural gas in Bunyoro region has caused excitement to people while the neighboring communities are worried about the impact of the extraction process on the environment. The National oil company (UNOC) officials have organized a sensitization meeting with the residents to address their worries.

Task

Using your knowledge of chemistry, make a write up of what the officials would present to the residents.

PART II

Answer ***one*** item from this part

Item 5

Kamuntu constructed a new house but without a garage for his car. Many of his friends wanted to know why he did not include a garage on the house. He told them that it was a technical advice from his engineer. This was insufficient explanation and the friends continued to demand for a better understanding. Secretly like his friends Kamuntu also kept wondering what problems the vehicle causes in the house.

Task

As a chemistry learner make a write up to help Kamuntu and his friends understand the advice of his engineer.

Item 6

Kamu-Kamu women's saving group have a ten acre forest of eucalyptus trees from which they have been harvesting fire wood to sell in the local market and beyond but could not fetch them enough income. The women decided to cut the trees for wood charcoal. This attracted the National Environment Management Authority(NEMA) officials to stop them. The action taken by Nema authorities was harsh and the women objected to it demanding a clear explanation and alternative ways of benefiting from natural resource.

Task

Using your knowledge of chemistry, help the women understand why NEMA stopped their economic activity.

END